CLAIMS

What is claimed is:

1. A method of substantially isolating a constituent of a sample, comprising: dispersing the sample in a mobile phase;

applying the sample to a first end of a papillary column comprising a matrix; and drawing the sample across a flowfront through said porous capillary column so as to enhance separation of the constituent therefrom.

- 2. The method of claim 1, further comprising detecting the constituent with at least one detector disposed proximate a detecting region of said capillary column.
- 3. The method of claim 1, further comprising applying a stationary phase to said matrix.
- 4. The method of claim 3, wherein said applying said stationary phase is effected before said applying the sample.
- 5. The method of claim 1, wherein said dispersing comprises vaporizing the sample in a gaseous mobile phase.
- 6. The method of claim 5, wherein said gaseous mobile phase is a substantially inert gas.
- 7. The method of claim 6, wherein said substantially inert gas is nitrogen, hydrogen, helium or argon.
- 8. The method of claim wherein said dispersing comprises dissolving the sample in a liquid mobile phase.

Sul 67/10

5

15

20

Jul 63

- 9. The method of claim 1, wherein said drawing separates the constituent from the sample on the basis of a size of the constituent.
- 10. The method of claim 1 wherein said drawing separates the constituent from the sample on the basis of an electrical charge of the constituent.
- 11. The method of claim 1, wherein said drawing separates the constituent from the sample on the basis of an affinity of the constituent for a capture substrate disposed on said matrix.

12. The method of claim 11, wherein said capture substrate is an antibody.

13. The method of claim 1, wherein said capture substrate is an antigen.

- 14. The method of claim 1, further comprising applying a differential pressure to said capillary column to effect said drawing.
- 15. The method of claim 1, wherein said drawing occurs without applying differential pressure to said capillary column.
- 16. The method of claim 15, wherein said drawing comprises capillary action induced by said matrix.
- 17. The method of claim 1, wherein said drawing comprises applying an electrical current across a length of said capillary column.
- 18. A method of identifying the presence of a constituent in a sample, comprising:
 providing the sample in a mobile phase;

24

10

5

7

20

25

applying the sample to a first end of a capillary column comprising a matrix; drawing the sample across a flowfront through said capillary column and in contact with a stationary phase disposed at a selected location along said capillary column; and detecting binding of the constituent with said stationary phase.

5

19. The method of claim 18, wherein said detecting comprises applying a detection reagent to at least said selected location and analyzing said detection reagent to determine whether the constituent is present.

10

20. The method of claim 19, wherein said analyze comprises quantifying a change in said detection reagent.

24/2 03/

21. The method of claim 18, wherein said detecting comprises determining an electrical characteristic of said selected location and comparing said electrical characteristic to an electrical characteristic of a control.

15

The method of claim 18, further comprising applying a stationary phase to said matrix.

and a

23. The method of claim 22, wherein said applying said stationary phase is effected before said applying the sample.

24

24. The method of claim\18, wherein said stationary phase comprises an antibody.

25. The method of claim 18, wherein said stationary phase comprises an n.

Sub-BI)

5

- 26. The method of claim 18, further comprising applying a differential pressure to said capillary column to effect said drawing.
- 27. The method of claim 18, wherein said drawing occurs without applying differential pressure to said capillary column.
- 28. The method of claim 27, wherein said drawing comprises capillary action induced by said matrix.
- 10 29. The method of claim 18, wherein said drawing comprises applying an electrical current across a length of said capillary column.

adbi2